Douglas Ta

407-280-5014 | douglas.ta@ufl.edu | GitHub | LinkedIn

Experience

Freedom Scientific | *Natural Language Processing Engineer (Part-time)*   **Remote | August 2023 – Present**
- Tasked to develop a CoPilot prototype for JAWS, a screen reader software designed to assist visually impaired users to use computers.
- Applied finetuning as well as implemented retrieval augmented generation techniques to leverage a LLM to help beginner users better understand how to use JAWS

Fire Neural Network | *Data Scientist*   **UF | January 2023 – August 2023**
- Utilized satellite data as well as data collected from High-Risk Lightning Detector's to train and maintain supervised machine learning models that predicted wildfires caused by lightning strikes
- Performed analysis on time series modeling of weather data to enhance predictive forecasting of machine learning models

Education

University of Florida, Gainesville, Florida | Class of 2024
Bachelor of Science in Computer Science   **GPA | 3.69**
Business Administration Minor

Relevant Coursework
- Machine Learning (Graduate)
- Introduction to Data Science
- Natural Language Processing
- Introduction to Software Engineering
- Introduction to Multi-Modal Machine Learning
- Information and Database Systems 1

Projects

Image Generation – Python, TensorFlow
- Trained a Generative Adversarial Network and Variational Autoencoder on the MNIST dataset to produce new images of hand-written numbers utilizing the Adam optimization

Housing Price Predicter – Python, Scikit-Learn
- Trained a supervised machine learning model using various algorithms to accurately predict the price of houses using both provided and engineered features

Building My Own Programming Language – Java
- Developed a Java based programming language to better understand the principles behind languages

Technical Skills

Language Proficiency:
- C++
- Java
- HTML
- Python
- SQL

Technical Experience With:
- Retrieval Augmented Generation
- Machine Learning Modeling
- Langchain
- Azure
- LLM Finetuning
- TensorFlow
- OpenCV

Leadership

UF Badminton Club | *President of UF Badminton*   **UF | Fall 2020 - Present**
- Organized service events for children's organizations teaching badminton and donating equipment
- Raised club funds by hosting intercollegiate badminton tournaments for universities in the South

ARC Tracker | *Concierge*   **Hybrid | June 2022 - Present**
- Work with HOAs to facilitate interactions more efficiently with homeowners and their requests